



DIVISION OF MINES
BOARD OF COAL MINING EXAMINERS
CERTIFICATION REQUIREMENTS

SURFACE ELECTRICAL REPAIRMAN

Article 3 of the Coal Mine Safety Laws of Virginia establishes requirements for certification of coal mine workers. The certification requirements are included in §45.1-161.24 through §45.1-161.41 in which the Board of Coal Mining Examiners is established for the purpose of administering the certification program. The Board has promulgated certification regulations 4 VAC 25-20 (VR 480-04-2), which set the minimum standards and procedures required for Virginia coal miner examinations and certifications.

CERTIFICATION CLASSIFICATION: **Surface Electrical Repairman*

This certification authorizes the holder to:

- Perform electrical work and inspections at surface locations of underground coal mines, preparation plants, and at surface (strip) coal mines (any surface location)
- Make examinations on electrical equipment
- Conduct and record results of electrical examinations

APPLICATION/EXPERIENCE REQUIREMENTS:

- Application (BCME-1) and \$10.00 fee 5 working days prior to examination
- One year of electrical experience in surface coal mining under the direction of a certified surface electrical repairman or appropriately related work experience approved by the Chief of the Division of Mines
- Six months credit will be granted for electrical training from a college, technical school, or vocational school
- Current first aid training (MSHA first aid 5000-23 acceptable)

EXAMINATION REQUIREMENTS: A score of 80% on each element of the examination

ELEMENTS OF EXAM	NUMBER OF QUESTIONS
▪ Alternating Current (AC)	20
▪ Direct Current (DC)	20
▪ Circuits & Equipment /drawings (CE)	20
▪ Cable Splicing (CS)	20
▪ High Voltage (HV)	20
▪ Legal Requirements (LR)	20
▪ Permissibility (PR)	20
▪ First Aid (MM)	20
▪ Gas Detection - practical demonstration	
▪ Records - Practical Stations (5)	
1. Control Circuit Troubleshooting - Electrical Schematic Reading (ER)	
2. Electrical Examinations - Record Keeping (RK)	
3. Cable Troubleshooting (CT)	
4. Circuit Breaking Troubleshooting (CB)	
5. Permissibility (PD)	

RECOMMENDED REFERENCE/STUDY MATERIALS:

- Electrical Study Guide/Student Training Guide
- Coal Mine Safety Laws of Virginia
- BCME Requirements
- MSHA (Basic First Aid) Manual 3
- Title 30 CFR Part 18, 75, 77
- Mine Gases Packet

The above mentioned study materials are available at the Department of Mines, Minerals and Energy's Big Stone Gap Office, Customer Assistance Center (276) 523-8233 and Keen Mountain Field Office (276) 498-4533.

***8 hours annual continuing education required to update certification.**

Revised 10/23/01